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**TO:** Examiner Padmavathi Baskar  
Examining Group 1645

**COMPANY:** United States Patent and  
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**FROM:** Frank C. Eisenschenk, Ph.D.  
Patent Attorney  
Registration No. 45,332

**DATE:** February 5, 2004

**NO. OF PAGES  
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**SUBJECT/MESSAGE:**

Re: U.S. Patent Application Docket No. UF-299XC1  
Ehrlichia Ruminantium Polypeptides, Antigens, Polynucleotides,  
and Methods of Use  
Serial No.: **10/081,051**; Date filed: February 20, 2002  
Applicants: Barbet *et al.*

**SUBMISSION TO PTO:**

1. Election under 35 U.S.C. §121

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ELECTION UNDER 35 U.S.C. § 121

Examining Group 1645

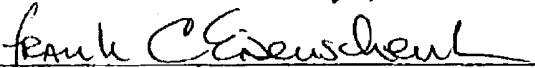
Patent Application

Docket No. UF-299XC1

Serial No. 10/081,051

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FEB 05 2004

  
Frank C. Eisenschenk, Ph.D., Patent Attorney

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner : Padmavathi Baskar  
Art Unit : 1645  
Applicants : Barbet *et al.*  
Serial No. : 10/081,051  
Filed : February 20, 2002  
For : Ehrlichia Ruminantium Polypeptides, Antigens, Polynucleotides, and Methods of Use

MS NON-FEE AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

ELECTION UNDER 35 U.S.C. § 121

Sir:

In response to the Office Communication dated January 6, 2004, the applicants hereby elect, without traverse, to prosecute the invention of Group I, SEQ ID NO: 52. Prior to the examination of the subject invention, it is respectfully requested that the application be amended as follows:

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Docket No. UF-299XC1  
Serial No. 10/081,051In the Claims:

1. (Currently Amended) An isolated polynucleotide sequence comprising SEQ ID NO:52 or the full-length complement thereof. comprising:

~~a) — a polynucleotide sequence selected from the group consisting of SEQ ID NOs:2, 3, 4, 8, 10, 12, 15, 17, 19, 20, 21, 23, 24, 25, 27, 29, 31, 32, 33, 34, 36, 38, 39, 41, 43, 45, 46, 47, 48, 51, 52, 53, 54, 56, 57, 58, 59, 61, 63, 64, 65, 67, 68, 69, 70, 72, 73, 74, 75, 77, 78, 79, 81, 82, 84, 85, 87, 88, 90, 92, 93, 94, 95, 96, 98, 100, 101, 103, 104, 105, 106, 108, 110, 114, and 115 or the complements thereof;~~

~~—— b) — a polynucleotide sequence having at least about 20% to 99.99% identity to a polynucleotide selected from the group consisting of SEQ ID NOs: a polynucleotide sequence selected from the group consisting of SEQ ID NOs:2, 3, 4, 8, 10, 12, 15, 17, 19, 20, 21, 23, 24, 25, 27, 29, 31, 32, 33, 34, 36, 38, 39, 41, 43, 45, 46, 47, 48, 51, 52, 53, 54, 56, 57, 58, 59, 61, 63, 64, 65, 67, 68, 69, 70, 72, 73, 74, 75, 77, 78, 79, 81, 82, 84, 85, 87, 88, 90, 92, 93, 94, 95, 96, 98, 100, 101, 103, 104, 105, 106, 108, 110, 114, and 115 or the complements thereof;~~

~~—— c) — a polynucleotide sequence encoding a polypeptide selected from the group consisting of SEQ ID NOs:5, 9, 11, 16, 18, 22, 26, 28, 30, 35, 37, 40, 42, 44, 55, 60, 62, 66, 71, 76, 80, 83, 86, 89, 97, 99, 102, 107, 109, 111, 112, 113, and 116 or the complement of a polynucleotide sequence encoding a polypeptide selected from the group consisting of SEQ ID NOs:5, 9, 11, 16, 18, 22, 26, 28, 30, 35, 37, 40, 42, 44, 55, 60, 62, 66, 71, 76, 80, 83, 86, 89, 97, 99, 102, 107, 109, 111, 112, 113, and 116; or~~

~~—— d) — a polynucleotide sequence encoding a polypeptide encoded by the complement of SEQ ID NOs:3, 20, 24, 32, 33, 47, 51, 53, 56, 57, 63, 68, 72, 73, 77, 78, 90, 93, 103, and 104; or~~

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~~—— e) —— a polynucleotide sequence encoding a polypeptide fragment or variant of a), b), c) or d), wherein said fragment or variant has substantially the same serologic activity as the native polypeptide; or~~

~~—— f) —— a polynucleotide sequence encoding a polypeptide fragment or variant of a polypeptide encoded by the complement of a), b), c), d), or e), wherein said fragment or variant has substantially the same serologic activity as the native polypeptide.~~

2. (Original) The isolated polynucleotide sequence of claim 1, wherein said polynucleotide sequence further comprises regulatory elements capable of causing the expression of said polynucleotide sequence in expression systems and, optionally, a polynucleotide sequence encoding a heterologous polypeptide sequence.

3. (Original) The isolated polynucleotide according to claim 2, wherein said polynucleotide sequence further comprises a vector.

4. (Original) The isolated polynucleotide sequence according to claim 3, wherein said vector is a vaccine vector.

5. (Original) The isolated polynucleotide sequence according to claim 3, wherein said vector is a replication vector.

6. (Original) The isolated polynucleotide sequence of claim 4, further comprising a carrier, pharmaceutical carrier, or adjuvant.

7. (Currently Amended) A host cell comprising a polynucleotide sequence according to claim 1, comprising:

~~—— a) —— a polynucleotide sequence selected from the group consisting of SEQ ID NOs: 2, 3, 4, 8, 10, 12, 15, 17, 19, 20, 21, 23, 24, 25, 27, 29, 31, 32, 33, 34, 36, 38, 39, 41, 43, 45, 46, 47, 48, 51, 52, 53, 54, 56, 57, 58, 59, 61, 63, 64, 65, 67, 68, 69, 70;~~

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~~72, 73, 74, 75, 77, 78, 79, 81, 82, 84, 85, 87, 88, 90, 92, 93, 94, 95, 96, 98, 100, 101, 103, 104, 105, 106, 108, 110, 114, and 115 or the complements thereof;~~

~~----- b) ----- a polynucleotide sequence having at least about 20% to 99.99% identity to a polynucleotide selected from the group consisting of SEQ ID NOs: a polynucleotide sequence selected from the group consisting of SEQ ID NOs: 2, 3, 4, 8, 10, 12, 15, 17, 19, 20, 21, 23, 24, 25, 27, 29, 31, 32, 33, 34, 36, 38, 39, 41, 43, 45, 46, 47, 48, 51, 52, 53, 54, 56, 57, 58, 59, 61, 63, 64, 65, 67, 68, 69, 70, 72, 73, 74, 75, 77, 78, 79, 81, 82, 84, 85, 87, 88, 90, 92, 93, 94, 95, 96, 98, 100, 101, 103, 104, 105, 106, 108, 110, 114, and 115 or the complements thereof;~~

~~----- c) ----- a polynucleotide sequence encoding a polypeptide selected from the group consisting of SEQ ID NOs: 5, 9, 11, 16, 18, 22, 26, 28, 30, 35, 37, 40, 42, 44, 55, 60, 62, 66, 71, 76, 80, 83, 86, 89, 97, 99, 102, 107, 109, 111, 112, 113, and 116 or the complement of a polynucleotide sequence encoding a polypeptide selected from the group consisting of SEQ ID NOs: 5, 9, 11, 16, 18, 22, 26, 28, 30, 35, 37, 40, 42, 44, 55, 60, 62, 66, 71, 76, 80, 83, 86, 89, 97, 99, 102, 107, 109, 111, 112, 113, and 116; or~~

~~----- d) ----- a polynucleotide sequence encoding a polypeptide encoded by the complement of SEQ ID NOs: 3, 20, 24, 32, 33, 47, 51, 53, 56, 57, 63, 68, 72, 73, 77, 78, 90, 93, 103, and 104; or~~

~~----- e) ----- a polynucleotide sequence encoding a polypeptide fragment or variant of a), b), c) or d), wherein said fragment or variant has substantially the same serologic activity as the native polypeptide; or~~

~~----- f) ----- a polynucleotide sequence encoding a polypeptide fragment or variant of a polypeptide encoded by the complement of a), b), c), d), or e), wherein said fragment or variant has substantially the same serologic activity as the native polypeptide.~~

8-17. Canceled

18. (New) A method of making a polypeptide comprising culturing the host cell according to claim 7 under conditions that allow for the expression of said polypeptide.

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19 (New) The method according to claim 18, further comprising the isolation of said polypeptide.

20. (New) An isolated polypeptide produced by the process of claim 19.

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Docket No. UF-299XC1  
Serial No. 10/081,051Remarks

Applicants hereby elect, without traverse, the polynucleotide of SEQ ID NO: 52 for examination on the merits. Applicants have also amended the claims to align the claims with the elected invention and have added a methods of using the claimed polynucleotides in conformance with Office policy as set forth in M.P.E.P § 821.04. Support for the newly presented claims can be found, for example, at paragraphs 51-59 and in Examples 1, 2, 4, and 7. Accordingly consideration of the currently presented claims is respectfully requested.

The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §§ 1.16 or 1.17 as required by this paper to Deposit Account No. 19-0065.

Respectfully submitted,



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